



LAKE FOREST COLLEGE

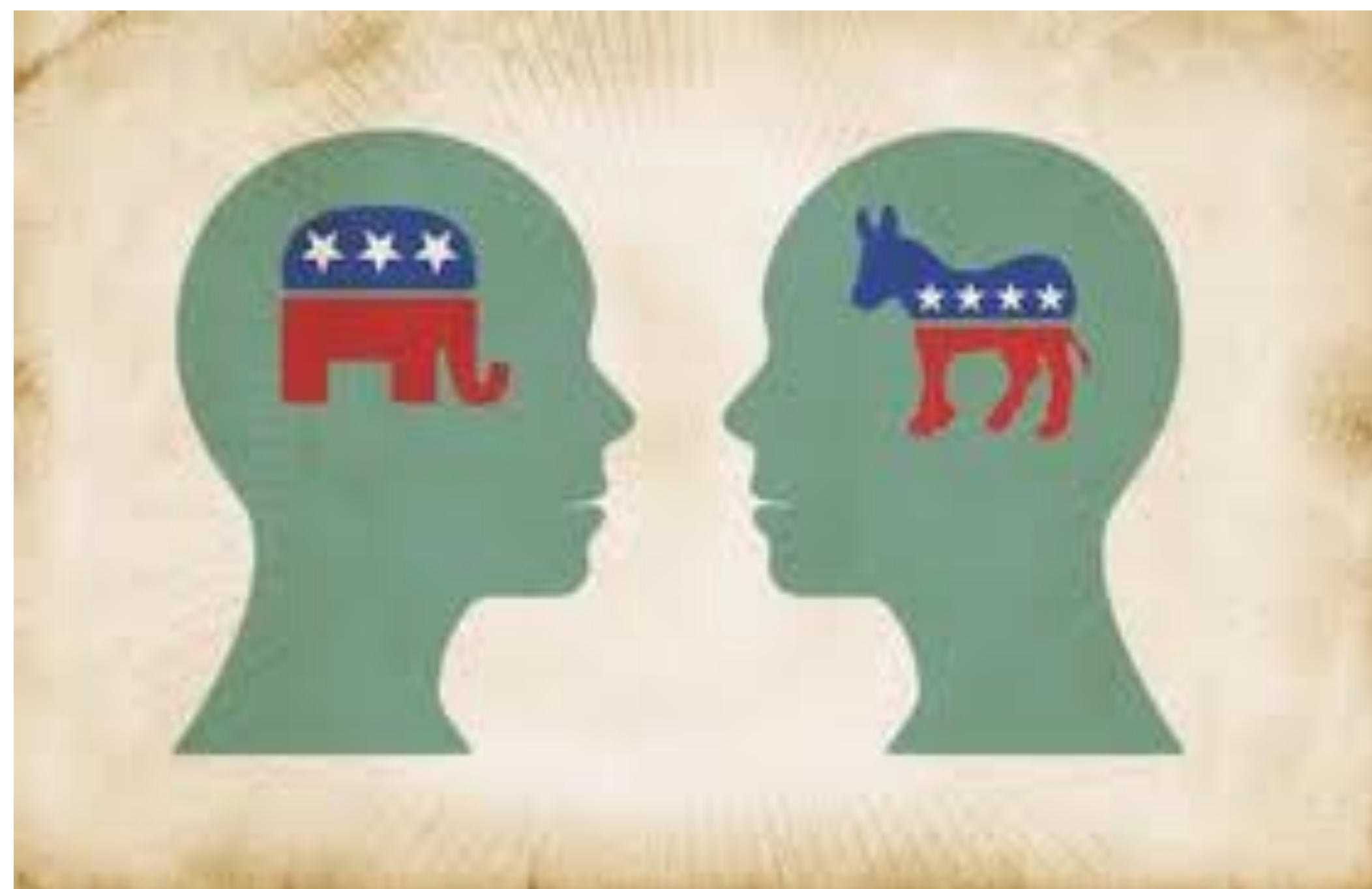
# Hindsight Bias in Political Elections

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## Abstract

The hindsight bias refers to the tendency for people to increase their confidence in a prediction after they've learned the outcome of an event; this is also known as the knew-it-all-along effect. The present study explored hindsight bias in the context of the 2012 United States presidential election. Participants were asked to predict various election outcomes one week before the election and then were asked to reconstruct those predictions one week after the outcome was known. The study showed strong evidence of hindsight bias and this bias did not depend on political affiliation, gender, or prior knowledge.



## Relevant Research

**Bonds-Raacke, J., Fryer, L., Nicks, S., & Durr, R. (2001)**

- There was no significant difference between gender and whom they predicted to win. Overall hindsight bias existed for the predictions of the outcome for the Super Bowl.

**Powell, J. (1988)**

- Overall, subjects estimated higher probability to the winning candidate, more knowledge about the candidate, and more confidence in their predictions after they knew the outcome.

**Fischer, I. & Budescu, D. (1995)**

- Results showed a hindsight bias in the post-election reconstruction of judgments in a multi-party election.

## Methods

### Participants, Materials & Procedure

- 83 participants started the study but, due to an attrition rate of about 11%, only 74 undergraduates took part in both phases of data collection; hence, all subsequent analyses are based on these 74 participants
- Pre-election and post-election surveys were distributed.
- The pre-election survey consisted of nine questions, in which the first five questions asked demographic questions and the final four questions were relevant for assessing hindsight bias.
- Each of the final four questions asked for two responses: a prediction about the election and their confidence in that prediction (0%-100%).
- The post-election survey consisted of these same final four questions from the pre-election survey in order to assess hindsight bias.
- Surveys were administered either by email or in person, roughly one week before and after the election.

## Purpose

The purpose of the present study was to examine hindsight bias in the context of the United States Presidential Election of 2012. This research was guided by the following questions:

- Will hindsight bias be shown in the current presidential election?
- Are there gender differences in hindsight bias, predictions, and/or confidence of those predictions?
- Are there differences in bias, predictions, or confidence that can be attributed to pre-existing political party preference?
- Does prior knowledge of politics and political theory influence hindsight bias?
  - Specifically, do politics majors show different patterns of performance than psychology majors?

## Results

From pre-election to post-election, if the participants originally thought Romney/Ryan would win, they were more likely to switch and say Obama/Biden after they knew the outcome.

Figure 1. PreQ6 vs. PostQ1

	Post-Who did you predict would win the 2012 Election?		Total
	Obama/Biden	Romney/Ryan	
Pre-Who do you predict will win the 2012 Election?	61	1	62
	3	9	12
Total	64	10	74

Chi-Square Tests				
	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	48.339 <sup>a</sup>	1	.000	
N of Valid Cases	74			

The confidence ratings did not show significant results but it did have a main effect of Political Preference. Overall, Democrats were more confident in their ratings. Democrats increased confidence on post-survey, but Republicans did not.

Figure 2. PreQ6 vs. PostQ1con

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Intercept	60.476	1	60.476	1055.863	.000
PolPref	.749	2	.374	6.537	.002
Error	4.667	71	.066		

Please state your political preference. \* prepost

Please state your political preference.	prepost	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Democrat/Liberal	1	.744	.029	.686	.802
	2	.796	.032	.732	.860
Republican/Conservative	1	.614	.043	.528	.699
	2	.612	.047	.517	.706
Other	1	.658	.039	.579	.737
	2	.630	.044	.543	.717

The strongest finding was from the expected margin of victory. The results showed a 10% increase. People were more likely to increase the percentage that Obama would win after they knew the outcome.

Figure 3. PreQ7 vs. PostQ2

Paired Samples Statistics						
Pair 1	Pre-By how much will they win? (percentage)	Post-By how much did you predict they would win? (percentage)	Mean	N	Std. Deviation	Std. Error Mean
2771	74	25718	.02990			

Paired Samples Test									
Pair 1	P	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
					Lower	Upper			
-1.0115	21646	.02516	-.15130	-.05100	-4.020	73	.000		

## Results

A mixed ANOVA revealed a significant main effect of pre-post (sig=.000) There was a significant interaction (sig=.026) showing that women demonstrated bigger bias than men.

Figure 4. Gender vs. PreQ7 vs. PostQ2

Gender	prepost	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Male	1	-.180	.039	-.103	-.257
	2	-.221	.043	-.134	-.307
Female	1	-.173	.036	-.102	-.243
	2	-.325	.040	-.245	-.405

Tests of Within-Subjects Effects						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	
Pre-post	.343	1	.343	15.485	.000	
Pre-Post * Gender	.115	1	.115	5.180	.026	

A paired-samples t-test revealed a significant increase in the number of battleground states Obama was expected to win. (sig=.021) There was no difference in confidence.

Figure 5. PreQ8A vs. PostQ3A

Paired Samples Statistics						
Pair 1	Pre-Battleground	Post-Battleground	Mean	N	Std. Deviation	Std. Error Mean
5.3014	73	1.44034	.16898			

Paired Samples Test								
Pair 1	Pre-Battleground	Post-Battleground	Mean	Std. Deviation	Std. Error Mean	t	df	Sig. (2-tailed)
						Lower	Upper	
-3.1507	-.58131	-.04883	-2.359	72	.021			

A paired-samples t-test of part B to PreQ8 and PostQ3, revealed a significant decrease in the number of battleground states Romney was expected to win.

Figure 6. PreQ8B vs. PostQ3B

Paired Samples Statistics						
Pair 1	Pre-Battleground-Romney-Win	Post-Battleground-Romney-Win	Mean	N	Std. Deviation	Std. Error Mean
3.6575	73	1.53857	.18008			

Paired Samples Test							
Pair 1	Pre-Post-Romney-Battleground	Mean	Std. Deviation	Std. Error Mean	t	df	Sig. (2-tailed)
					Lower	Upper	
-.32877	-.04287	.61467	2.292	72	.026		

A paired-samples t-test of the confidence ratings showed more confidence in lowered Romney predictions after they knew the outcome.

Figure 7. PreQ8Bcon vs. PostQ3Bcon

Paired Samples Statistics						
Pair 1	Pre-Q8-Confidence	Post-Q8-Confidence	Mean	N	Std. Deviation	Std. Error Mean
-.5470	71	2.8565	.03390			

Paired Samples Test							
Pair 1	Pre-Post-Q8-Conf	Mean	Std. Deviation	Std. Error Mean	t	df	Sig. (2-tailed)
					Lower	Upper	
-.06310	-.12071	-.00549	-2.185	70	.032		

## Summary

The results showed an overall hindsight bias in the predictions of the Presidential Election.

- Generally, people were ten percent more likely to increase the percentage that Obama would win after they knew the outcome.
- Overall women showed a stronger bias than men when looking at the expected margin of victory.
- The expected margin of victory was what gave the most biased results.
- Overall, Democrats were more confident than Republicans.
- After increasing the number of states that Obama would win, participants revealed more confidence (after the fact) in their lowered Romney predictions.

## References

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